

WHAT IS CLAIMED IS:

1. A method, comprising:  
displaying, at a client site, a view page which hosts a plug-in;  
supplying, by said view page, a link to said plug-in, said link pointing to a filler page on a server, said filler page providing list content with specified content structure;  
downloading, by said plug-in from said server site, said filler page; and  
rendering, by the plug-in at said client site, said list content according to said content structure specified by said filler page.
2. The method according to claim 1, wherein said plug-in includes a Java applet.
3. The method according to claim 1, wherein said plug-in includes an ActiveX control.
4. The method according to claim 1, wherein said filler page comprises:  
a heading specifying a sequence of attributes specifying the structure of a data tuple; and  
a list data comprising at least one said data tuple, each data tuple being structured according to said sequence of attributes.
5. The method according to claim 4, wherein said sequence of attributes define at least one of:  
an identification that uniquely identifies each of said at least one data tuple;  
a text string;  
an image; and  
a data link.
6. The method according to claim 5, wherein said data link includes a HTML link.
7. The method according to claim 5, wherein said data link includes a link to a filler page.

8. The method according to claim 4, further comprising:  
zero or more buttons, each of said zero or more buttons being used to invoke a corresponding operation to be performed on said list data.
9. The method according to claim 8, wherein each of said zero or more button comprises:  
an identification that uniquely identifies a button;  
a description associated with said button to describe the operation to be performed when said button is clicked; and  
a link pointing to a corresponding button handler that performs said operation associated with said button on said list data.
10. The method according to claim 8, wherein said rendering by said plug-in comprises:  
rendering said heading according to said sequence of attributes;  
rendering said list data using said at least one tuple according to said sequence of attributes; and  
rendering said zero or more buttons, each of said zero or more buttons being rendered according said description and being implemented according to said link to said associated button handler that performs said corresponding operation when said each of said zero or more buttons is clicked.
11. The method according to claim 8, further comprising:  
manipulating said list data; and  
updating said list data.
12. The method according to claim 11, wherein said updating comprises:  
triggering a list data update unit in said plug-in;  
determining a mode of updating, said mode of updating including a full update or a delta update;

downloading, if the mode of updating corresponding to full update, the filler page from the server site, the downloaded filler page corresponding to a new timestamp and representing a full update;

rendering the full update;

generating, if the mode of updating corresponding to a delta update, by a delta update unit, a delta update query, based on a timestamp associated with said list data;

sending said delta update query to a delta update handler at said server site;

identifying, by said delta update handler, delta changes based on said timestamp specified in said delta update query;

generating a delta update based on said delta changes using a second new timestamp;

sending said delta update with said second new timestamp to said delta update unit;

rendering the delta update; and

processing said new timestamp and said new second new timestamp to replace said timestamp.

13. A system, comprising:

a view page at a client site, said view page hosting a plug-in for displaying and manipulating list content;

a filler page, hosted on a server, for providing list data, associated heading specifying the content structure of said list data, and zero or more buttons each of which facilitating an operation on said list data, said list data including at least one data tuple structured according to said heading; and

zero or more button handlers on said server site for facilitating said operation on said list data, each of said zero or more button handlers corresponding to one of said zero or more buttons specified in said filler page.

14. The system according to claim 13, further comprising:

a delta update handler located on said server, for performing operations related to updates performed on said list data.

15. The system according to claim 14, wherein said delta update handler comprises:

a delta change identification mechanism for identifying changes made to said at least one data tuple in said list data since a time specified by a timestamp;

a delta update generator for generating a delta update containing a set of data tuples that have been updated since said time; and

a delta update sender to send said delta update to said plug-in.

16. The system according to claim 15, wherein said plug-in includes a Java applet.

17. The system according to claim 15, wherein said plug-in comprises:

a list content renderer for rendering said list data according to said heading, said zero or more button, and said delta update; and

a user interaction mechanism for conducting interactions on said list data, said interactions activating manipulations to be performed on said list data via said zero or more buttons.

18. The system according to claim 17, further comprising:

Zero or more local button handlers for facilitating some of said manipulations to be performed at said client site on said list data and for dispatching some of said manipulations to said zero or more button handlers located at said server site; and

a local list data manipulation unit for supporting said manipulations to be performed at said client site.

19. The system according to claim 18, further comprising:

a list data update unit for updating the data tuples in said list data that are changed.

20. The system according to claim 19, wherein said list data update unit comprises:

a full update unit for performing a full update on said list data; and

a delta update unit for performing a delta update on said list data.

21. The system according to claim 20, further comprising:

a first timer for regulating the frequency of the full update performed by the full update unit; and

a second timer for regulating the frequency of the delta update performed by the delta update unit.

22. The system according to claim 20, wherein said delta update unit comprises:

a delta update query generator for generating a delta update query based on said timestamp to inquiry about the delta changes made to said list data, said delta update query being sent to said delta update handler;

a delta update receiver for receiving said delta update generated by said delta update handler with said new timestamp and for initiating a delta update rendering request to said list content renderer based on said delta update; and

a delta update processing unit for processing said delta update to update said timestamp with said new timestamp.

23. A computer-readable medium having program code stored therein for causing, when executed, dynamic web list display to occur, comprising

displaying, at a client site, a view page which hosts a plug-in;

supplying, by said view page, a link to said plug-in, said link pointing to a filler page on a server, said filler page providing list content with specified content structure;

downloading, by said plug-in from said server site, said filler page; and

rendering, by the plug-in at said client site, said list content according to said content structure specified by said filler page.

24. The medium according to claim 23, wherein said filler page comprises:

a heading specifying a sequence of attributes specifying the structure of a data tuple; and

a list data comprising at least one said data tuple, each data tuple being structured according to said sequence of attributes.

25. The medium according to claim 24, further comprising:

zero or more buttons, each of said zero or more buttons being used to invoke a corresponding operation to be performed on said list data.

26. The medium according to claim 23, wherein said rendering by said plug-in comprises:

rendering said heading according to said sequence of attributes;

rendering said list data using said at least one tuple according to said sequence of attributes; and

rendering said zero or more buttons, each of said zero or more buttons corresponding to an operation to be performed when said each of said zero or more buttons is clicked.

27. The medium according to claim 23, wherein the program code when executed further causes:

manipulating said list data; and

updating said list data.

28. The method according to claim 27, wherein said updating comprises:

triggering a list data update unit in said plug-in;

determining a mode of updating, said mode of updating including a full update or a delta update;

downloading, if the mode of updating corresponding to full update, the filler page from the server site, the downloaded filler page corresponding to a new timestamp and representing a full update;

rendering the full update;

generating, if the mode of updating corresponding to a delta update, by a delta update unit, a delta update query, based on a timestamp associated with said list data;

sending said delta update query to a delta update handler at said server site;

identifying, by said delta update handler, delta changes based on said timestamp specified in said delta update query;

generating a delta update based on said delta changes using a second new timestamp;

sending said delta update with said second new timestamp to said delta update unit;

rendering the delta update; and  
processing said new timestamp and said new second new timestamp to replace said  
timestamp.